The following supplement accompanies the article

Diet composition and provisioning rates of nestlings determine reproductive success in a subtropical seabird

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Table S1. Total length-mass relationships of common fish species in brown pelican diets, northern Gulf of Mexico, 2013 – 2015.

Species	Year	Equation	Intercept	Slope	R^2	*p*
Brevoortia patronus	2013–2014	mass = $e^{-12.233}$ * length$^{3.138}$	−12.23	3.14	0.99	< 0.001
	2015	mass = $e^{-12.06}$ * length$^{3.10}$	−12.06	3.10	0.98	<0.001
Micropogonius undulatus	2013–2014	mass = $e^{-11.298}$ * length$^{2.926}$	−11.30	2.93	0.83	< 0.001
	2015	mass = $e^{-9.862}$ * length$^{2.630}$	−9.862	2.630	0.99	< 0.001
Leiostomus xanthurus	2013–2015	mass = $e^{-11.324}$ * length$^{2.976}$	−11.32	2.98	0.98	< 0.001
Trichiurus lepturus	2013–2014	mass = $e^{-16.051}$ * length$^{3.278}$	−16.05	3.28	0.97	< 0.001
Lagodon rhomboides	2015	mass = $e^{-9.980}$ * length$^{2.763}$	−9.980	2.763	0.97	< 0.001
Anchoa mitchilli	2015	mass = $e^{-10.470}$ * length$^{2.641}$	−10.470	2.641	0.86	< 0.001
Anchoa hepsetus	2015	mass = $e^{-8.603}$ * length$^{2.223}$	−8.603	2.223	0.87	< 0.001
Opisthonema oglinum	2015	mass = $e^{-11.553}$ * length$^{3.001}$	−11.553	3.001	0.97	< 0.001

Table S2. Regional mean energy density values (kJ g^{-1}) and lipid values (% dry mass) used in calculating energy densities of meals fed to brown pelican nestlings, 2014–2015.

Species	Biomass	% of total	Energy density	% lipids	N	Source
Northwestern Gulf of Mexico (Galveston Bay – Corpus Christi Bay, Texas)						
Gulf menhaden	42157	67.2				
Adult	23201	37.0	4.77	13.7	39	1a
First-year	18956	30.2	3.53	4.7	9	1a
Striped mullet	4020	6.4	3.95	6.9	6	1a
Atlantic croaker	2818	4.5	3.75	5.0	39	1a
Atlantic cutlassfish	2798	4.5	5.05	13.9	12	1a
Spot	2260	3.6	4.83	13.5	9	1a
Bay anchovy	1648	2.6	4.12	8.6	20	1b
Pinfish	1065	1.7	4.63	9.6	9	1a
Spotted seatrout	973	1.6	3.48	2.6		Sand seatrout (1a)
Unknown	873	1.4	4.16	2		All samples (1a)
Sand seatrout	787	1.3	3.48	2.6	9	1a
Southern kingfish	638	1.0	4.05	2.6		Sand seatrout (1a)
Red drum	485	0.8	4.54	8.1	1	1a
Silver perch	384	0.6	4.33			Yellow perch (2)
Spanish mackerel	303	0.5	3.60	2.6		3
Gafftopsail catfish	300	0.5	4.95			Flathead catfish (4)
Atlantic bumper	191	0.3	3.60	2.6		Spanish mackerel (3)
Striped anchovy	174	0.3	4.88	10.2	9	1b
Sheepshead minnow	156	0.3	4.21			Gulf killifish (5)
Atlantic harvestfish	145	0.2	3.42	1.6		Atlantic butterfish (6)
Anchovy sp.	80	0.1	4.28	8.4		All anchovies (1b)
King mackerel	65	0.1	3.60	2.6		Spanish mackerel (3)

Species	Biomass	% of total	Energy density	% lipids	N	Source
Ballyhoo halfbeak	51	0.1	3.92	1.2		Black needle (7)
Gulf butterfish	48	0.1	3.42	1.6		Atlantic butterfish (6)
Porcupinefish	43	0.1	4.16	9.3		All samples (1a)
Atlantic threadfin herring	42	0.1	5.46	20.3	2	1a
Chicken (bait)	39	0.1	4.60	3.0		8
Pigfish	36	0.1	4.88			9
Pink shrimp	35	0.1	4.16	5.2	4	1a
Violet goby	34	0.1	4.81			Black goby (10)
Bay whiff	13	< 0.05	4.00			Winter flounder (11)
Striped killifish	13	< 0.05	4.21			Gulf killifish (5)
Bighead searobin	13	< 0.05	4.63	3.6		Red searobin (12)
Atlantic moonfish	12	< 0.05	3.60	2.6		Spanish mackerel (3)
Inland silverside	11	< 0.05	4.80			Brook silverside (4)
Inshore lizardfish	11	< 0.05	4.16	9.3		All samples (1a)
Bluntnose jack	10	< 0.05	3.60	2.6		Spanish mackerel (3)
Banded drum	4	< 0.05	4.54	9.3		Red drum (1a)
Sardine sp.	2	< 0.05	5.18	3.61	2	1b
Northeastern Gulf of Mexico (Mobile Bay, Alabama – Apalachee Bay, Florida)						
Gulf menhaden	15817	49.6				
Adult	14985	47.0	4.80	12.7	12	1b
First-year	827	2.6	3.36	4.0	4	1b
Bay anchovy	5052	15.8	4.12	8.6	20	1b
Dusky anchovy	2189	6.9	4.38	5.2	1	1b
Atlantic threadfin herring	1633	5.1	4.67	7.7	6	1b
Striped anchovy	1221	3.8	4.88	10.2	9	1b
Pinfish	1165	3.7	4.65	13.2	12	1a
Atlantic croaker	819	2.6	5.24	16.8	6	1a
Striped mullet	684	2.1	3.95	6.9	8	1b
Atlantic cutlassfish	657	2.1	5.05	13.9	12	1a
Atlantic bumper	394	1.2	3.60	2.6		Spanish mackerel (3)
Sand seatrout	313	1.0	3.48	2.6	9	1a
Red snapper	307	1.0	4.44	3.9		13
Spot	279	0.9	4.83	13.5	9	1a
Unknown	268	0.8	4.45	10.7		All samples (1b)
Anchovy sp.	184	0.6	4.36	8.1		All anchovies (1b)
Frigate mackerel	183	0.6	3.60	2.6		Spanish mackerel (3)
Sand perch	150	0.5	4.45	10.7		All samples (1b)
Spotted seatrout	131	0.4	3.48	2.6		Sand seatrout (1a)
Scaled sardine	103	0.3	5.18	11.3	2	1b
Round scad	93	0.3	3.60	2.6		Spanish mackerel (3)
Spottail tonguefish	90	0.3	4.00			Winter flounder (11)
Bay whiff	52	0.2	4.00			Winter flounder (11)
Inshore lizardfish	35	0.1	4.45	10.7		All samples (1b)
Houndfish	23	0.1	3.92			Black needle (7)
Bighead searobin	21	0.1	4.63			Red searobin (12)
Atlantic brief squid	18	0.1	4.25			Squid (10)
Gafftopsail catfish	13	< 0.05	4.95			Flathead catfish (4)
Pink shrimp	5	< 0.05	4.16	5.2	4	1a
Inland silverside	4	< 0.05	4.80			Brook silverside (4)
Gulf butterfish	3	< 0.05	3.42			Atlantic butterfish (6)
Isopod	0.5	< 0.05	2.59			

1) This study (a: Eastern, b: Western); 2) Hartman and Brandt 1995; 3) Jodice et al. 2011; 4) Eggleton and Schram 2002; 5) Wedge et al. 2015; 6) Roth et al. 2008; 7) Fernandes et al. 2014; 8) USDA; 9) Adams 1976; 10) Karpouzi 2005; 11) Plante et al. 2005; 12) Eder and Lewis 2005; 13) Schwartzkopf 2014

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